New Substance Abuse Building, Section 23 09 23
CORRECTIONS and ADDITIONS.

The Siemens Apogee existing protocol for connecting to various systems is MODBUS TCPIP or MSTP. BACnet is not an option.

1.3 COORDINATION

23 09 23 - 2
D. Chillers
2. Water chillers will be furnished with unit mounted variable frequency drives and control panels. Control panels include an EMS interface. ADD
The EMS interface to the Siemens Apogee system shall be MODBUS TCPIP or MSTP. Contractor is responsible for coordinating the communication protocol between the building Control system, equipment, and other control interface requirements.

23 09 23 - 3
L. Electrical Switchboard
1. Main electrical switchboard shall be equipped with a power monitoring system. Power monitoring system shall have an EMS interface. Wiring from power monitoring system to EMS is specified in this Section. ADD
The EMS interface to the Siemens Apogee system shall be MODBUS TCPIP or MSTP. Contractor is responsible for coordinating the communication protocol between the building Control system, equipment, and other control interface requirements.
23 09 23 - 5
Y. Switchgear Interface: Main electrical distribution panel shall be equipped with a power monitoring system. Power monitoring system shall have an EMS interface. Wiring from power monitoring system interface to DDC Panel is specified in this Section. ADD
The EMS interface to the Siemens Apogee system shall be MODBUS TCPIP or MSTP. Contractor is responsible for coordinating the communication protocol between the building Control system, equipment, and other control interface requirements.
Drawing M7.04 Detail 3. Emergency Generator Control Diagram
Delete BACnet, and use MODBUS TCPIP or MSTP only for interface to the Siemens Apogee System. ADD
Contractor is responsible for coordinating the communication protocol between the building Control system, equipment, and other control interface requirements.
Drawing M7.04 Detail 4. Automatic Transfer Switches
Delete BACnet and use MODBUS TCPIP or MSTP only for interface to the Siemens Apogee System. ADD
Contractor is responsible for coordinating the communication protocol between the building Control system, equipment, and other control interface requirements.
Drawing M7.05 Detail 3. Emergency Powers Switchgear Monitoring
Delete BACnet and use MODBUS TCPIP or MSTP only for interface to the Siemens Apogee System. ADD
Contractor is responsible for coordinating the communication protocol between the building Control system, equipment, and other control interface requirements.

Drawing M7.05 Detail 4. Electrical Power Switchgear Monitoring
Delete BACnet and use MODBUS TCPIP or MSTP only for interface to the Siemens Apogee System. ADD Contractor is responsible for coordinating the communication protocol between the building Control system, equipment, and other control interface requirements.

23 09 23 -22

2.9 VARIABLE FREQUENCY DRIVES

A. Acceptable Manufacturers: Drives shall be as manufactured by ABB or Yaskawa

J. EMS Interface: Each drive shall be equipped with an interface card for direct connection to the DDC panel. Interface shall allow direct communication between the drive and the EMS. Interface shall as a minimum provide the following functions: start/stop, status, and alarm status.

Drawings M7.11 VARIABLE FREQUENCY DRIVES "Reference Products " ABB **or** Yaskawa Variable Frequency Drives as an Acceptable Manufacturers..

Drawings M7.11 VARIABLE FREQUENCY DRIVES "Remarks" Provide Disconnect and EMS interface.

ADD The EMS interface to the Siemens Apogee shall be the Floor Level Network connection for consistency with existing Yaskawa and ABB VFD's.

23 64 00 - 9

PART 2 - PRODUCTS

2.1 CENTRIFUGAL WATER-COOLED WATER CHILLERS

R. 5. Chiller Control Panel :Delete open protocol network and BACnet and use MODBUS TCPIP or MSTP only for interface to the Siemens Apogee System. ADD Contractor is responsible for coordinating the communication protocol between the building Control system, equipment, and other control interface requirements.